

Government Meteorological Observatory.

METEOROLOGICAL Observations at Kelburn, Wellington, for the month of March, 1940. Observations taken at 9 a.m.

Altitude of Observatory, 415 ft.

Date.	Pressure, in Millibars, at Sea-level and Standard Gravity.	Temperature (° F.) from Observations at 9 a.m.						Wind.			Rainfall, in Points (100 Points = 1 Inch.)	Bright Sunshine: Hours and Tenths.	Weather (Symbols) at 9 a.m.	
		In Screen.					Minimum on Grass.	Beaufort Scale.		Anemometer.				
		At 9 a.m.			Maxi-mum.	Mini-mum.		Direction.	Force.					Run in 24 Hours.
		Dry.	Wet.	Humid-ity.										
1	1015.6	61.5	59.6	89	63.0	60.0	59.0	NW	1	345	39	0.0	oir	
2	1024.3	63.0	56.7	65	71.1	52.2	43.9	ESE	2	31	..	12.0	b	
3	1017.8	59.8	54.9	72	65.7	56.0	53.5	NW	4	157	Trace	9.5	bc	
4	1003.1	63.0	53.2	48	64.7	55.8	53.1	W	4	377	5	5.7	b	
5	1020.4	56.9	52.4	72	64.2	48.0	43.0	NE	1	119	Trace	9.4	cb	
6	1015.5	57.9	54.8	81	62.0	52.5	49.5	NW	6	209	1	8.6	c	
7	1024.7	58.1	54.8	80	62.4	54.4	52.4	SSE	3	255	..	10.1	c	
8	1030.2	60.1	52.5	57	64.0	48.0	40.0	SE	3	167	..	11.5	b	
9	1023.2	58.9	53.2	67	68.0	45.4	37.7	E	1	83	..	11.2	b	
10	1011.8	58.4	54.5	77	60.8	52.0	45.4	SE	4	130	3	6.1	b	
11	1011.2	44.9	43.9	92	57.1	42.8	42.7	S	2	186	32	6.6	or	
12	1016.8	57.1	52.1	69	64.2	43.2	40.3	NW	3	172	..	10.8	b	
13	1012.0	64.2	59.1	72	71.6	54.8	52.2	NNW	3	192	..	8.4	b	
14	1022.3	58.6	55.4	81	67.6	46.9	40.7	NE	3	115	..	9.0	o	
15	1021.1	57.9	55.1	82	61.7	55.3	52.7	NE	4	163	..	1.9	o	
16	1017.4	60.4	57.6	83	65.6	54.2	53.4	NW	4	235	..	5.2	o	
17	1014.3	60.0	55.0	71	65.2	47.5	43.7	ESE	1	225	..	11.1	bz	
18	1020.3	61.2	57.3	77	65.2	51.2	43.2	N	3	136	1	7.0	bc	
19	1021.5	56.3	54.4	88	59.1	53.1	52.7	NNW	4	156	..	0.4	ojp	
20	1015.0	58.7	55.4	80	61.0	55.1	53.8	NW	6	212	48	0.1	o	
21	997.4	60.2	60.2	100	64.4	57.3	57.1	NW	8	438	2	5.2	or	
22	1012.3	51.7	48.3	77	55.8	49.0	46.5	SE	3	386	..	0.1	o	
23	1021.8	55.8	49.1	59	61.3	46.7	39.8	SE	1	112	..	9.0	bc	
24	1028.0	57.1	52.3	70	69.5	43.8	34.8	S	1	63	..	11.4	b	
25	1024.6	58.5	55.0	79	62.1	50.7	46.6	NW	6	149	..	10.0	c	
26	1014.5	59.2	56.0	81	63.4	53.9	51.3	WNW	5	302	11	6.9	o	
27	1016.6	53.5	50.0	77	57.3	47.2	46.8	SSE	3	320	..	7.0	ou	
28	1012.0	55.4	50.4	68	60.7	45.7	39.8	NW	3	85	..	3.9	o	
29	1010.0	60.7	56.0	73	68.4	52.4	48.7	NW	3	209	..	8.3	b	
30	1022.6	57.3	52.5	70	67.2	48.5	41.8	SE	1	143	..	10.0	bz	
31	1020.1	56.7	54.8	87	59.6	52.0	48.5	N	4	142	..	0.7	o	
Means, &c.	1017.4	58.2	54.1	76	63.7	50.8	46.9	..	3.2	194	142	217.1	..	

Mean earth temperature at 1 ft., 62.0°; and at 3 ft., 62.5°. Number of rain days, 9. Total rainfall, 56 per cent. below normal. Sunshine, 56 per cent. of the possible. Mean dew-point at 9 a.m., 48.6°; mean vapour pressure, 0.342 in.

DIRECTION OF WIND.											
Gale (force 8 or more).	Forces 4 to 7.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Calm.	
1	11	3	3	2	7	3	..	1½	11½	..	

NOTE.—Very light hail fell on the 4th and 11th.

NOTES ON THE WEATHER FOR MARCH, 1940.

General Notes.—The month was on the whole fine, cool, and dry. From the meteorological point of view the period was quiet and uneventful, with a steady sequence of anticyclones across the New Zealand area. There was little growth in the North Island where, however, feed is still plentiful in most districts. The dry spell is being felt more in the South Island where, from mid-Canterbury southwards, the feed position is rather acute. The drought and insect pests have seriously affected many of the crops of supplementary feed. Throughout the whole country stock are in excellent condition. The good weather has helped the late harvesters and has not interfered with cultivation.

Rainfall.—Except in a few small areas rainfall was well below normal. Over the greater part of the Dominion less than 50 per cent. of the average was recorded, while many totals were below 1 in. In parts of Otago and Southland there was an excess due solely to the heavy rain which commenced on the night 31st March-1st April. The month's total was above average in the Bay of Islands district because of the heavy fall on the 25th. Apart from the steady drizzle on the 1st and the localized rains just mentioned, most of the precipitation came as passing showers.

On the 11th numerous thunderstorms occurred—some were violent—and were accompanied by sharp showers of rain and hail.

Temperatures averaged some 2 degrees below normal, the departures being more pronounced in the west. Cool, clear nights were frequent, so that heavy dews and some frosts were experienced, particularly in the south. Frosts, damaging garden plants, were fairly general over the North Island on the 12th.

Sunshine.—There was abundant sunshine, most stations having more than average values. The excess was particularly marked in the south and east of the South Island, where Christchurch and Dunedin had record amounts for March.

Weather Sequence.—The situation was disturbed on the 1st when there was widespread drizzle, but an improvement followed as an anticyclone moved on to New Zealand, although scattered light rain persisted in the northern portion of the North Island. Disturbances in advance of another anticyclone crossed the country on the 4th, when a change to strong and squally south-westerly winds was accompanied by showers. Temperatures were cool but the weather became for the most part fine. On the 8th a tropical depression to the north-east was the cause of strong south-easterly winds with some rain in North Auckland and Gisborne districts, the falls being greater in the latter area. Fine weather ruled elsewhere until the 10th, when a weak trough brought a southerly change. The rainfall was light and, although winds stayed strong at first, the weather rapidly improved.

Weak depressions began to affect the South Island on the 15th, some light drizzle falling in Westland and Otago, but the disturbances gave a few scattered showers as they moved northwards. On the 17th a further anticyclone extended on to the Dominion, giving good weather. Cloud increased on the 19th, when there were many morning fogs and light rain developed in Taranaki, Wellington, and Southland. With the advance of a deep depression across the South Tasman Sea, strong north-westerly winds prevailed about Cook Strait and rain fell in western areas, and, after the depression moved to the south-east of the Dominion, winds turned to the south-west bringing scattered showers and, in the south, some hail. Winds quickly decreased and fine weather became almost general. However, in the far north strong easterly winds prevailed making the weather cloudy with occasional rain. On the 20th strong north-westerlies were again experienced about the Cook Strait region, but as a low-pressure trough moved past New Zealand, cool, showery conditions accompanied a southerly change, the weather subsequently clearing. In the north, however, the weather was cloudy and very heavy rain fell in a limited area near Russell where the 24-hour fall was 10.45 in. The high-pressure area had remained centred over the North Tasman Sea but the system embraced all New Zealand on the 30th, so that fine weather was again general, but on the last of the month a new depression produced unsettled conditions in Southland.

M. A. F. BARNETT, Director.